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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,186	07/08/2004	Yorishige Ishii	61336(70904)	3467

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EDWARDS ANGELL PALMER & DODGE LLP  
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BOSTON, MA 02205

EXAMINER
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CURS, NATHAN M

ART UNIT	PAPER NUMBER
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2613

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/501,186

Applicant(s)

ISHII ET AL.

Examiner

Nathan Curs

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. Figures 10 and 11 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 1-4 are objected to because of the following informalities:

Claim 1 has informalities including grammatical problems or other confusing wording: in line 16, "... (1)" should be deleted; in line 18, "(a)" and "(b)" should be deleted; in line 19, "first module and on the first-module-side" should be "first module on the first-module-side"; in line 20, "S1\_ is power" should be "S1\_ is the power"; in lines 24-25, "minimum value... as a transmittance of the optical fiber" should be "minimum value... of a transmittance of the optical fiber"; in line 28, "as the value" should be deleted.

Claim 2 has informalities including grammatical problems or other confusing wording: in line 17, "... (2)" should be deleted; in line 22, "(a)" and "(b)" should be deleted; in line 23, "first module and on the first-module-side" should be "first module on the first-module-side"; in line

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28, "as a value" should be deleted; line 20, "system as a" should be "system of a"; in line 33, "as the value" should be deleted.

Claim 3 has informalities including grammatical problems or other confusing wording: in line 16, "... (3)" should be deleted; in line 18, "(a)" and "(b)" should be deleted; in line 19, "first module and on the first-module-side" should be "first module on the first-module-side"; in lines 23, 25 and 28, "as a value" should be deleted.

Claim 4 has informalities including grammatical problems or other confusing wording: in line 16, "... (4)" should be deleted; in lines 21-22, "(a)" and "(b)" should be deleted; in line 22, "first module and on the first-module-side" should be "first module on the first-module-side"; in lines 27-28, 30 and 32, "as a value" should be deleted.

Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-4, and thus also depending claim 5, repeatedly use the phrases "being capable of", "acceptable", "various values", "adoptable", "to be", and "it is assumed". These phrases make the bounds and scope of their corresponding limitations ambiguous, or make it unclear if the limitations are definitely being claimed.

Claim 1, lines 17-20, claim 2, lines 21-23, claim 3, lines 17-20, and claim 4, lines 21-23, each recites the limitation "a reflectivity of light emitted from the second module and on the first module and on the first-module-side end of the optical fiber". The language of this limitation is

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unclear. The claims have been examined assuming the limitation is intended to mean, "a reflectivity of light emitted from the second module and reflected from the first module on the first-module-side end of the optical fiber".

In Claim 2, lines 19-20 and 26-27 and claim 4, lines 18-19 and 25-26, modules (plural) are equated with the first module (singular). Therefore, it's unclear if the "first module" is being claimed as one module or more than one module.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- US Patent Application Publication No. 2002/0154369 – This published application, having common inventors with the instant application, discloses a spatial relationship between an optical module and the end of an optical fiber, where a vertical top portion of the fiber end is used for transmission and a vertical bottom portion is used for reception.
- US Patent No. 4329017 – discloses fixing a spatial relationship between an optical receiver module and the end of an optical fiber and using reflective surfaces.
- US Patent No. 4045120 – discloses an coupler between an optical fiber and photodiode, where the refractive index and thickness of the coupler is chosen for reducing spurious signals at the receiver.
- US Patent No. 4381882 – discloses an optical fiber termination for bidirectional optical transmission where the fiber end face has an inclined surface and the receiver is spatially arranged with respect to the inclined surface.

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6. Any inquiry concerning this communication from the examiner should be directed to N. Curs whose telephone number is (571) 272-3028. The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached at (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (800) 786-9199.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pairedirect.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**SHI K. LI**  
**PRIMARY PATENT EXAMINER**